



KRILL DESIGN

*From trash to **treasure***

KRILL DESIGN

Our vision

We want to propose a **Green Economy** model that combines the need to manage the **waste recycling** process in an innovative way and the creation of new products by offering **Circular Economy projects**.

We want to help give new value to organic waste by transforming them, thanks to our Know How, into **eco-design products** with a story to tell.

We believe that **technological innovation** and **creativity** are **the right recipe to implement an ecological transition necessary for the good of the planet we live on.**



WHO WE ARE

Our mission

Krill Design is an innovative start up in Milan, born in 2018 with a specific mission: **to give new value to the organic waste of food industry.**

We give new life to food by-products by transforming them into **natural and compostable biopolymers** with which we create **functional eco-design products for the needs of your Company**, thanks to the most innovative **3D printing** technologies.

We offer a **tailor made** service accompanying your company in every phase of the project and we manage the entire process adapting it to your needs. we give substance to the sustainability of your company.



Ivan Calimani
CEO e founder



Yack H. Di Maio
R&D Director & Co-founder



Martina Lamperti
Project Manager & Co-founder

And we are not alone! We are able to do all this thanks to **our team of 15 people:** designers, 3D printing technicians, chemical engineers...





“We create **value** through circular
economy projects”





HOW

Krill Design Formula

1. Research and Development

We identify, analyze and study food waste thanks to our team of Green Chemistry experts



2. The transformation of waste

From what was previously only waste we generate our exclusive Rekrill® biomaterial



3. Product Design

Our team of specialized designers designs products of excellence



4. Production

We use our digital manufacturing lab to print products thanks to the most innovative 3D printing technologies



5. Communication

Our products become a vehicle for telling a 100% circular story



REKRILL®

A new sustainable material

We have patented an innovative material called **Rekrill®: 100% biodegradable and compostable**, Rekrill® is made starting from the by-products of the food chain.

We can transform different types of **homogeneous organic waste** such as **peels, shells, seeds, coffee grounds**.

The products made in Rekrill® become the concrete realization of a new production culture. They embody a history of **circular economy and sustainability**.



dried orange peels



pastazzo



pellet Rekrill® orange



filament



REKRILL® impact



In terms of kg eq of CO₂ emissions, REKRILL® has a very **low carbon footprint** compared to the most common plastics.

REKRILL®

PC (PolyCarbonate)

ABS

PP (PolyPropylene)

HDPE

PET

1,74 kg CO₂ eq/kg REKRILL®

6,00 kg CO₂ eq/kg PC

5,29 kg CO₂ eq/kg ABS

4,44 kg CO₂ eq/kg PP

4,36 kg CO₂ eq/kg HDPE

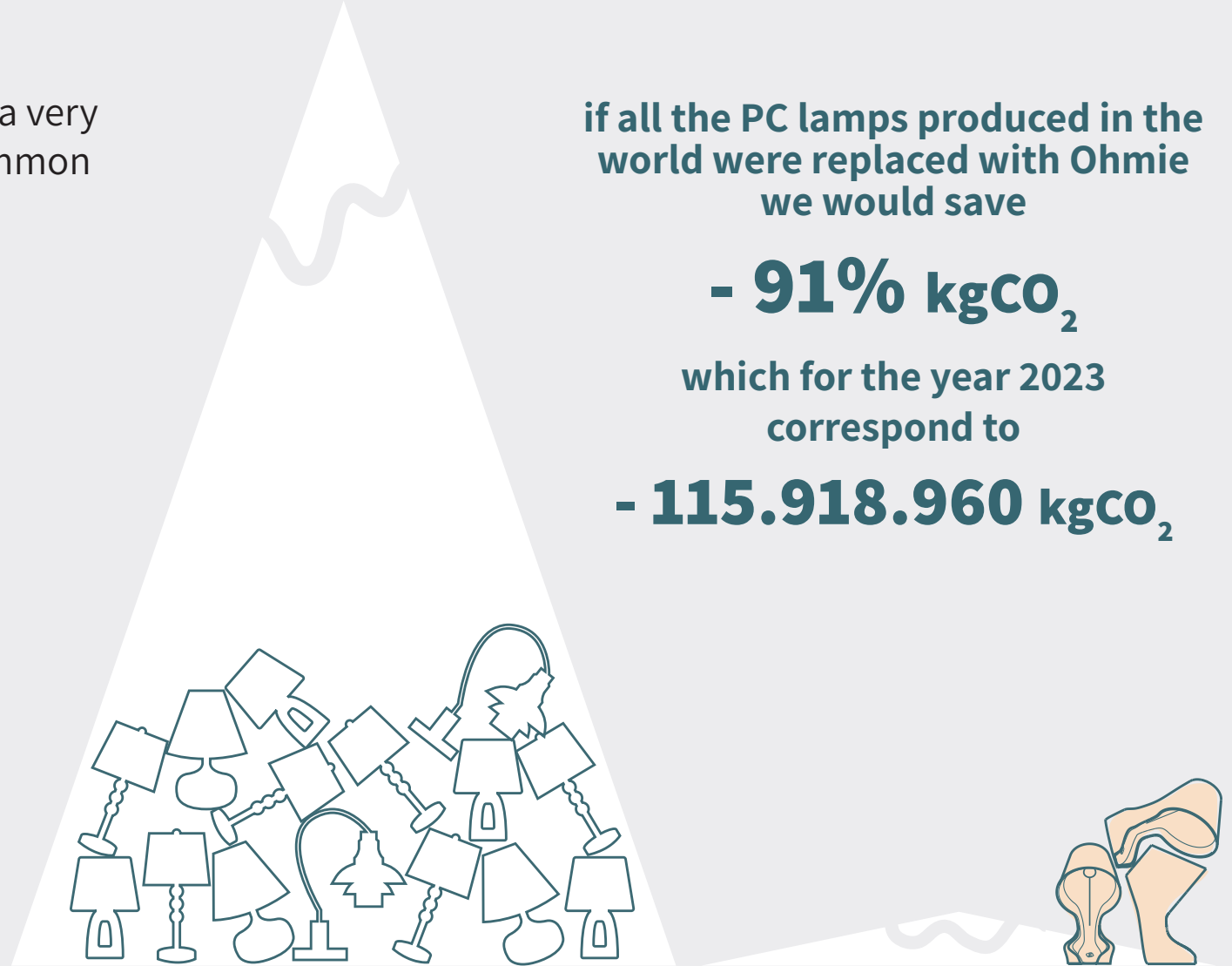
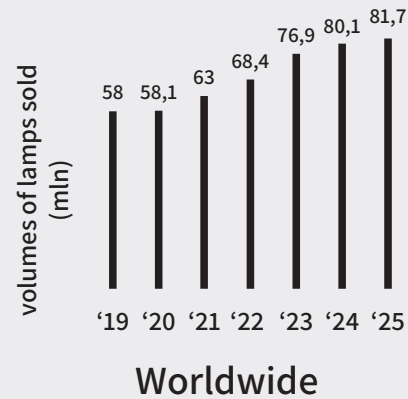
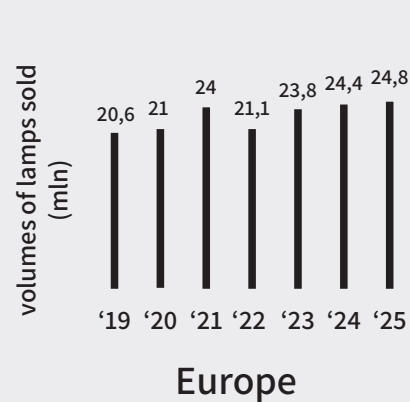
3,59 kg CO₂ eq/kg PET

if all the PC lamps produced in the world were replaced with Ohmie we would save

- 91% kgCO₂

which for the year 2023 correspond to

- 115.918.960 kgCO₂



DIGITAL MANUFACTURING

Production on demand and tailor made

We create eco-design products **designed ad hoc** to meet the needs of your company.

We use our digital manufacturing hub with over 50 **3D printers** of different sizes, which allows us to produce **on demand**, making our **model flexible and scalable** to meet production demand ranging from a few pieces up to thousands.



WHAT WE OFFER

From waste to eco-design product



Promotional campaigns

Exhibitions and Events

Installations

Products that reward

Point of sale furniture

BENEFITS

Circular Economy at the service of the company



Sustainability

Strengthen your **sustainability report** by transforming your waste into **value** for your company, **reducing the impact of CO₂ emissions**



Innovation

We produce through digital manufacturing technologies, using **3D printers**



Tailor made service

We follow **every step of the process**: from the initial need to the final product



Visibility

The projects we offer have a **great narrative potential**



Personalization

We design and customize each product to measure, even in small quantities



World Class Team

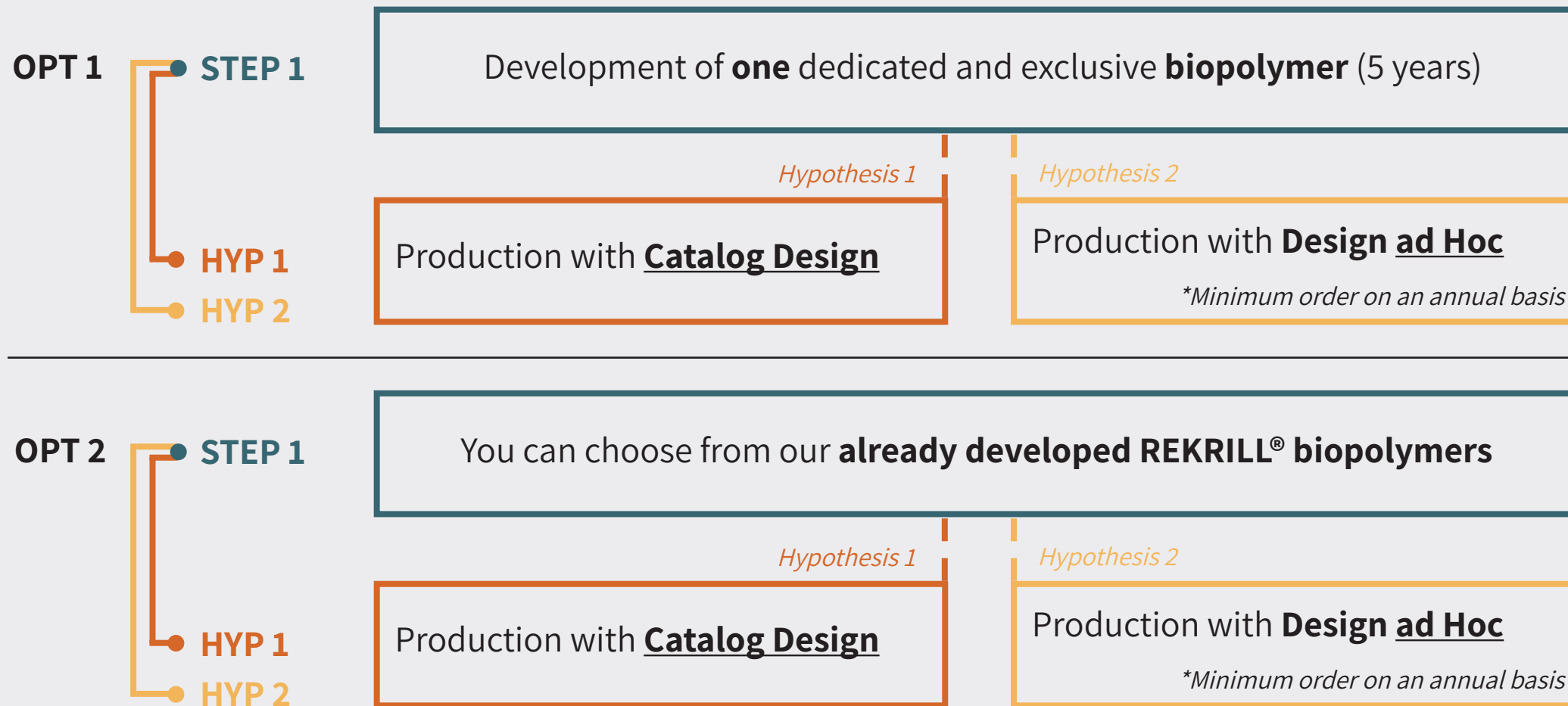
We are a **multidisciplinary team** that combines different personalities and skills

A valuable project

two options



Krill Design gives you the opportunity to develop an **innovative material** by generating new value from your production waste. A great **asset** for your company and a great resource for your **sustainability report**.
A material with which to always create new products, without further polymer development costs.



WHY CHOOSE KRILL DESIGN?

Honors and awards



In 2021 we were awarded by **Cross the Bridge** and by **Filiere di Economia Circolare**

Since 2021 we have been part of **B Corp Climate Collective** and **Learning Leadership for Change**

2020 saw us winners of the **Gaetano Marzotto Special Award for Innovation** and **Horizon-2020 Circularity Voucher**

In 2022 Confindustria awarded us as the **Best Performer company in the Circular Economy for services to companies**



SUSTAINABLE REPORT



REKRILL®, our patented material, can do more with less

REKRILL® is circular in all of its components

REKRILL® is 100% compostable in all environments



REKRILL® is 100% compostable in marine environments

REKRILL® < 1 year before dissolving in seawater

LDPE 450 years before dissolving in seawater



KRILL DESIGN'S NET

Krill Design is committed to activities with the municipality of Milano, like the Co.ffee Era project, and offers activities for primary and infancy schools, or specialized workshop for design Universities



REKRILL®, a new sustainable material

1,74 kg CO₂ eq/kg REKRILL®

6,00 kg CO₂ eq/kg PC

4,44 kg CO₂ eq/kg PP

The Ohmie Lamp reduces CO₂ emissions by 91% compared to one of the best-selling PC table lamps



Krill Design's B2B partnerships

- Autogrill
- Sanpellegrino
- Illy Caffè
- Gruppo Cimbali
- Veuve Clicquot
- Enel
- Arla Foods
- Officina Naturae
- Caffè Barbone
- Terna



WE ARE PROUD
of our partnerships



Sanpellegrino

Sicily's Revolution



The Need

Create a line of sustainable products by promoting a circular economy process within the company.

The Solution

Use the orange peels of Sanpellegrino soft drinks which become a new resource for the company. Their life cycle does not end, but the skins are transformed into a biomaterial for 3D printing. From the collaboration with the **Seletti** brand, iconic products are born, which preserve the memory of their origin in the colors and textures.



1. Sicily's Revolution

Recovery of waste from the squeezing of oranges for Sanpellegrino drinks



2. Biomaterial

Development of biomaterial from waste to Rekrill® Orange



3. 3D Printing

Production using digital manufacturing technologies



4. Products

Table lamp, tray, glacettes

Autogrill Was Orange

The Need

Create a line of sustainable products by promoting a circular economy process within the company.

The Solution

Transforming orange peel into a biomaterial with which to produce, through 3D printing, furnishing accessories for 4,000 Autogrill stores around the world.



1. Was Orange

Recovery of the orange peels of the juices



2. Biomaterial

Development of biomaterial from waste to Rekrill® Orange



3. 3D Printing

Production using digital manufacturing technologies



4. Products

Products for Autogrill bars at the service of customers: sugar bags, napkin holders, menu holders (..)

Comune di Milano

Co.ffee Era



The Need

Eliminate the costs relating to the management and disposal of organic waste borne by public administrations and the community.
Redevelop a Bovisa neighborhood.

The Solution

Transforming coffee waste produced by neighborhood bars and restaurants to create Eco-Design products and furnishings for everyday use, designed with the collaboration of the Design students of the **Politecnico of Milan**.



1. Co.ffee Era

Recovery of coffee grounds from the Cafè in Milan



2. Biomaterial

Development of the Rekrill® Coffee biomaterial from coffee grounds



Comune di
Milano



3. 3D Printing

Production using digital manufacturing technologies



4. Products

Home products, Penne Porta, Lamps, Watches, Subtazza (..)

Cimbali

Coffee products for coffee



The Need

Use the coffee scraps created during the coffee machine tests.
Promote a circular economy model within the Cimbali Group.

The Solution

Transforming the coffee waste produced by Gruppo Cimbali during tests on its machines to create objects-accessories that can be sold and used together with the machines, such as tampers and cup warmers.



1. Coffee products for coffee

Recovery of used coffee used to test coffee machines



2. Biomaterial

Rekrill® Coffee biomaterial development
exhausted coffee



GRUPPO
CIMBALI



3. 3D Printing

Production using digital manufacturing technologies



4. Products

Realization of products to be sold together with coffee machines, such as tampers and warming cups

Enel

Light up waste



**We do even simple things,
from plastic to plastic.**

The Need

Give new life to the abandoned counters of the company avoiding they will become refusal.

The Solution

Reuse plastic of abandoned counters to print in 3D furnishing accessories for Enel offices.

Creating events, such as **Focus Live in 2019** at the Museum of Science and Technique-Milan, with Live 3D Printing.



1. Light up waste

Recovering of the company's abandoned counters



2. Recycling

Development of the regenerated polymer



3. 3D Printing

Production using digital manufacturing technologies



4. Products

Suspension lamps for installations and offices

WHAT IS SAID ABOUT US

Press



la Repubblica

“L’eccellenza dell’agricoltura e del design italiani, racchiusi in un unico prodotto, simbolo di un’innovazione sostenibile necessaria.”

Forbes

“Can you imagine a lamp printed in 3D made with orange peels? It’s hard for anyone to think of this, but that’s what the Milanese studio is all about Krill Design He has made”

The
Guardian

Il Sole
24 ORE

CORRIERE DELLA SERA
Living®

WIRED

WORLD
ECONOMIC
FORUM

VOGUE

de
zeen

LAMPOON

Artribune
DAL 2011 ARTE ECCETERA ECCETERA



WHO WE WORKED WITH

Our clients





“ Let’s design
the **future** together ”





WHERE TO FIND US

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